# THUSARA SARATH

Software Engineer
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## PROFESSIONAL PROFILE

Passionately coding for over 10 years with high proficiency in both C++ and C#, I am an enthusiastic team player dedicated to researching and crafting efficient software solutions.

## SKILLS

- Languages: C/C++, C#.NET, Java, JavaScript, HTML, CSS, SQL
- Tools: JIRA, Git (GitHub, Bitbucket)
- Environments: Linux/Windows, Visual Studio, Sublime Text, CLion IDE, WebStorm

## EXPERIENCE

**Software Developer** – *NeuronicWorks Inc.* 2015-Present

Lead developer and/or team member spanning multiple software projects in C++ and C#.

- Improved C# software used to control a 120 DSLR Camera 3D scanning system by reducing over 80% of crash reports, redesigning UX elements, and adding new features.
- Efficiently traced though newly inherited source code and fixed bugs and/or added features for multiple projects
- Used Agile methodology: JIRA issue tracking, git version control, Git-Flow branching model
- Met with clients for requirements analysis and software prototyping based on project timeline/budget
- Collaborated with industrial designers and firmware engineers and mentored coworkers.

**Co-Founder & Lead C++ Developer** – *FFsplit* 2012-2015

Designed and implemented a software solution for desktop content streaming with over 20,000 downloads

- Rapid software development (RAD) using Bitbucket revision control in C++/C#
- Considerably minimized CPU usage by refactoring older graphics code into efficient DirectX code
- Created a DirectShow plugin that interfaced with the popular FFMPEG open source library
- Increased performance by over 200% on multicore CPUs by using multithreading
- Communicated with over a thousand end-users and aggregated user feedback and bug reports

## PROJECTS

**Athletic Performance Tracker** – *Hack'N'Talk Hackathon* 2015

- Designed a wearable microcontroller with accelerometers to transmit positional data over Bluetooth in C++
- Developed a Java program to graph the data in real-time to help find patterns in athletic movement

**ARM Cortex Media Player** – *University Project* 2014-2015

- Programmed an ARM Cortex M3 Microcontroller in C and Assembly to display images on an LCD screen, play audio files, and process joystick input
- Leveraged RTOS capabilities such as threading and task scheduling to significantly increase responsiveness.

## EDUCATION

- Bachelor of Computer Engineering – Ryerson University 2015
- International Baccalaureate (IB) Diploma – Victoria Park Collegiate Institute 2008